ENERGY ANALYSIS AND POLICY, GRADUATE/PROFESSIONAL CERTIFICATE

The Energy Analysis and Policy certificate (EAP) provides students with the opportunity to customize their graduate experience, adding energy training to any graduate degree program offered at the University of Wisconsin–Madison. Graduate students can complete the EAP certificate by selecting courses that meet both their degree and EAP requirements. As such, most students can add EAP onto a degree without any additional time or cost. Many prospects choose UW–Madison specifically to participate in the EAP program, while others join EAP upon learning about it after matriculation.

Since its formation in 1980, EAP has provided students with the skills and knowledge needed by professionals in government, energy companies, consulting firms, and other organizations. EAP draws students from across campus. Particularly large student groups from public policy, environmental studies, engineering, and urban planning pursue the certificate because of the program’s interdisciplinary curriculum which considers a wide range of technical, economic, political, and social factors that shape energy policy formulation and decision-making.

ADMISSIONS

EAP welcomes applications from students in any graduate degree program at UW-Madison that allows students to pursue a certificate. Students may apply to the EAP program concurrently with their graduate school application or once they have matriculated at UW-Madison. Acceptance into EAP is contingent on enrollment in a graduate degree program.

While there are no prerequisites to the program, it is recommended that EAP applicants have completed at least one college-level course in each of the following five subject areas: physical science (physics or chemistry); natural science (biology, environmental, geology or atmospheric and oceanic); economics; social sciences or humanities (besides economics); and calculus or statistics.

HOW TO APPLY

The following materials are required for a completed application:

1. A completed online application form: Energy Analysis and Policy (EAP) application
   a. A one-page Statement of Interest (included in online application form)
2. Copies of any undergraduate and graduate school (current and previous) transcripts. Unofficial transcripts (including a UW-Madison Student Record (https://registrar.wisc.edu/studentrecord)) are accepted if official transcripts have been submitted through their graduate school application. Students may request a copy of their transcripts from the office of the Graduate Student Coordinator in their home department.

In addition to the online form, transcripts should be sent via email attachment, campus mail, or US post to:

Scott Williams
spwilliams@wisc.edu
Room 2162 Wisconsin Energy Institute
1552 University Ave.
Madison, WI 53726

DEADLINES

Applications to EAP may be submitted at any time, but applicants are encouraged to apply before the end of their first year in graduate school to ensure timely completion of certificate requirements.

REQUIREMENTS

Each EAP student must complete six courses (18 credits), including an introductory course, a capstone seminar, and one course from each of four categories: Energy Technology and Resources, Energy Economics and Business, Energy Policy, and Energy and Environment.

The following courses are offered regularly, though other courses (with approval by the EAP faculty program committee) may fulfill one of the requirements below (see note under Other Qualifying Courses (p. 2)).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR ST/</td>
<td>Introduction to Energy Analysis and Policy</td>
<td>6</td>
</tr>
<tr>
<td>PUB AFFR/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>URB R PL 809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENVR ST/</td>
<td>Energy Analysis and Policy Capstone</td>
<td></td>
</tr>
<tr>
<td>PUB AFFR/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>URB R PL 810</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Energy Technology and Resources

Choose one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOSCI/</td>
<td>Energy Resources</td>
</tr>
<tr>
<td>ENVIR ST 411</td>
<td></td>
</tr>
<tr>
<td>N E 571</td>
<td>Economic and Environmental Aspects of Nuclear Energy</td>
</tr>
<tr>
<td>ENVR ST/</td>
<td>Renewable Energy Systems</td>
</tr>
<tr>
<td>BSE 367</td>
<td></td>
</tr>
<tr>
<td>M E/CBE 567</td>
<td>Solar Energy Technology</td>
</tr>
<tr>
<td>E C E 356</td>
<td>Electric Power Processing for Alternative Energy Systems</td>
</tr>
<tr>
<td>CBE 562</td>
<td>Special Topics in Chemical Engineering (Topic: Energy and Sustainabili)</td>
</tr>
<tr>
<td>BSE 460</td>
<td>Biorefining: Energy and Products from Renewable Resources</td>
</tr>
<tr>
<td>CIV ENGR 639</td>
<td>Special Topics in Geotechnical Engineering (Topic: Wind Energy Site/Design)</td>
</tr>
<tr>
<td>E C E 427</td>
<td>Electric Power Systems</td>
</tr>
</tbody>
</table>

Energy Economics and Business

Choose one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVR ST/</td>
<td>Energy Economics</td>
</tr>
<tr>
<td>A A E/ECON/</td>
<td></td>
</tr>
<tr>
<td>URB R PL 671</td>
<td></td>
</tr>
<tr>
<td>A A E/ENVIR ST/</td>
<td>Benefit-Cost Analysis Counts for either Economics or Policy requirement</td>
</tr>
<tr>
<td>POP HLTH/</td>
<td></td>
</tr>
<tr>
<td>PUB AFFR 881</td>
<td></td>
</tr>
</tbody>
</table>
Energy Analysis and Policy, Graduate/Professional Certificate

A A E 760  Frontiers in Environmental and Natural Resource Economics 1
A A E/ECON/ F&W ECOL  531  Natural Resource Economics
A A E 643  Foundations of Environmental and Natural Resource Economics

Energy Policy  3
Choose one of the following:

ENVIR ST/ POLI SCI/ PUB AFFR  866  Global Environmental Governance
PUB AFFR/ A A E/ENVIR ST/ POP HLTH  881  Benefit-Cost Analysis  Counts for either Economics or Policy requirement
ENVIR ST/ ECON/POLI SCI/ URB R PL  449  Government and Natural Resources
ENVIR ST  349  Climate Change Governance
ATM OCN  401  Topics in Meteorology (Topic: Introduction to Air Quality)  Counts for either Policy or Environment requirement

Energy and Environment  3
Choose one of the following:

ENVIR ST  401  Special Topics: Environmental Perspectives in the Physical Sciences (Topic: Introduction to Air Quality)  Counts for either Policy or Environment requirement
ENVIR ST/ POP HLTH  560  Health Impact Assessment of Global Environmental Change
ENVIR ST/ POP HLTH  502  Air Pollution and Human Health
CIV ENGR  423  Air Pollution Effects, Measurement and Control
M E  466  Air Pollution Effects, Measurements and Control

Total Credits  18

OTHER QUALIFYING COURSES
Because the scheduling of the preceding courses is coordinated with the needs of their home departments, EAP cannot guarantee that specific courses will always be offered at specific times or rotations. Each semester, the EAP program faculty will consider other qualifying courses for the upcoming semester that fulfill one of the categories above. Once approved, the EAP Academic Coordinator will distribute a list of course offerings for the upcoming semester to students in the EAP program.

COURSE SUBSTITUTIONS
Students may propose course substitutions by contacting the Academic Coordinator or the Faculty Chair. The EAP Chair makes the final decision. Students should provide a course syllabus and a letter of endorsement from the faculty member teaching the course, preferably before the start of the course. The substitution proposal will be considered based upon the following criteria:

1. the extent to which the course content is devoted to energy
2. the rigor of methodology applied to the course material
3. the context of the class with respect to the student’s study plan

For up-to-date contact information of EAP faculty and staff, visit eap.wisc.edu/faculty (https://eap.wisc.edu/faculty)

FACULTY EXECUTIVE PROGRAM COMMITTEE
Paul Wilson (Certificate Chairperson), Rob Anex, Alan Carroll, Xiaodong Du, Tracey Holloway, Bernard Lesieutre, Gregory Nemet, Scott Williams, Paul Zedler (Ex Officio)

EAP FACULTY AFFILIATES
Vicki Bier, Sarah Johnston, Douglas Reinemann, Matt Turner

EAP PROGRAM STAFF
John Greenler, Scott Williams

PEOPLE
For up-to-date contact information of EAP faculty and staff, visit eap.wisc.edu/faculty (https://eap.wisc.edu/faculty)